

**REMARKS**

Claims 15-34 are pending in the application. Claims 1-14 have been canceled and new claims 15-34 have been added by the foregoing amendment. The new claims correspond to the canceled claims.

More specifically, new independent system claim 15 replaces canceled independent system claim 1 and new independent method claim 28 replaces canceled independent method claim 11.

The new claims more clearly distinguish the present application from the cited reference by highlighting separate image projectors as suggested by the Office Action.

Claims 1-4 and 10-12 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,661,752 (Spink et al.). Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Spink and claims 7-9 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Spink in view of U.S. Patent No. 5,002,375 (Hoppl et al.). Applicants respectfully request withdrawal of these rejections and allowance of the pending claims.

Applicants' invention is directed a microscopy system for observing an object by plural observers. As recited in claim 15 (corresponding to cancelled claim 1) for example, the microscopy system comprises at least one objective lens arrangement for receiving an object side beam emanating from an object plane and for transforming the object side beam into an image side beam, a first ocular system arranged to enable a first observer to observe the object by looking into the first ocular system, a second ocular system arranged to enable a second observer to observe the object by looking into the second ocular system and a controller.

The first ocular system comprises at least one first ocular tube having at least one first ocular for generating an image of the object plane from the image side beam and at least one first image projector having a first display for superimposing an image displayed by the first display with a beam path of the first ocular system such that the image of the object plane is perceived by the first observer in superposition with the image of the first display.

The second ocular system comprises at least one second ocular tube, distinct from the at least one first ocular tube, and having at least one second ocular for generating an image of the object plane from the image side beam, and at least one second image projector, distinct from the at least one first image projector, and having a second display, distinct from the first display, for superimposing an image displayed by the second display with a beam path of the second ocular system such that the image of the object plane is perceived by the second observer in superposition with the image of the second display.

At least one optical setting of the first ocular system is adjustable independently of a corresponding optical setting of the second ocular system. The controller is configured to generate the image displayed by the first display of the first ocular system from a first input image based on the at least one optical setting of the first ocular system as well as to generate the image displayed by the second display of the second ocular system from the first input image based on the at least one optical setting of the second ocular system.

In Applicants' invention, each of the plural observers uses a separate ocular system; that is, one ocular system is associated with one observer. The image perceived by the user looking into the ocular system originates from two sources: the first source is the optically generated image of the object plane and the second source is the image projector having the display.

Two image projectors, each having a distinct display, are utilized. The image of each display is superimposed with the respective optically generated image of the object plane in the ocular systems. Each observer perceives an electronically generated image which is superimposed with the optically generated image. The electronically generated image is generated by a display and projected into the beam path such that it is superimposed with the optically generated image.

For this purpose, each of the ocular systems has its own image projector and display. That is, there are plural projectors and displays in Applicants' invention as more clearly recited in new claim 15 (corresponding to canceled claim 1).

Spink describes a shutter control for the integration of additional data into an observation beam path by selectively switching off an undesired observation channel. Spink, however, discloses a microscopy system having two ocular systems (represented by oculars 20a, 20b, 21a and 21b) with only one display 16 and projector 14 for superimposing the electronically generated image with the optically generated images of both ocular systems.

Spink (Figs. 5-7) describes optically generated images of the object plane (col. 2, lines 14-45. Furthermore, Spink teaches (col. 2, lines 14-45) that the main observer 41 uses both optical outputs 21a and 21b stereoscopically, whereas the assistant 40 may use optical outputs 20a and 20b only stereoscopically when he is opposite to the main observer (Figure 5). In other situations (Figures 6 and 7), the assistant is on the right and left side, respectively, of the main observer and may then only use one output (either 2Db or 20a) such that he may not perceive a stereoscopic image. The other embodiments illustrated in Spink (i.e. Figs. 1-4) include only one single display 16.

The use of shutters disposed in the beam paths of first and second ocular systems in Spink is also relied upon for allegedly anticipating the optical settings of Applicants' invention as claimed.

The shutters of Spink determine whether to display the electronically generated image in superposition with the optically generated image in the left or right ocular. The need for this determination rises since only one image projector and display is provided for both the first and second ocular system (and four oculars) in Spink. Since Applicants' invention includes plural displays and image projectors, there is no need for such shutters in Applicants' invention.

Spink fails to disclose plural displays or image projectors. Therefore, Applicants' invention as recited in claim 15 (as well as method claim 28) is not anticipated by (nor is it obvious over) Spink. At least for these reasons, it is believed claims 15 and 28 are allowable.

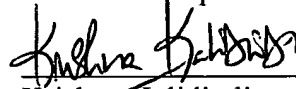
The remaining claims (i.e. claims 16-27 and 29-34) all of which depend on one of allowable claims 15 and 28 are also allowable. Furthermore, the deficiencies of Spink are not overcome by the teachings of Hoppl.

All of the rejections having been overcome, it is believed that this application is in condition for allowance and a notice to that effect is solicited. Should the Examiner have any questions with respect to expediting the prosecution of this application, he is urged to contact the undersigned at the number listed below.

Respectfully submitted,

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Date: November 25, 2005